

Approved For Release 2000/08/08 : CIA-RDP96-00789R003000330001-2
SCIENTIFIC OVERSIGHT COMMITTEE

- STEVEN A. HILLYARD
 - PROFESSOR OF NEUROSCIENCES
UNIVERSITY OF CALIFORNIA, SAN DIEGO
- JAMES PRESS
 - PROFESSOR OF STATISTICS
UNIVERSITY OF CALIFORNIA, RIVERSIDE
- MELVIN SCHWARTZ
 - ASSOCIATE DIRECTOR FOR HIGH ENERGY & NUCLEAR PHYSICS
BROOKHAVEN NATIONAL LABORATORY
NOBEL PRIZE, PHYSICS (1988)
- YERVANT TERZIAN
 - PROFESSOR OF PHYSICAL SCIENCES
CORNELL UNIVERSITY
- PHILLIP G. ZIMBARDO
 - PROFESSOR OF PSYCHOLOGY
STANFORD UNIVERSITY
- GARRISON RAPMUND (OBSERVER)
 - MAJOR GENERAL, USA RETIRED IN 1986 AS ASSISTANT
SURGEON GENERAL (R&D) AND COMMANDER,
ARMY MEDICAL R & D COMMAND

Steven A. Hillyard

Scientific Oversight Committee

EDUCATION

1968 Ph.D., Psychology, Yale University
1964 B.S., Biology, California Institute of Technology

PROFESSIONAL EXPERIENCE

1980 – Present Professor of Neurosciences, Department of Neurosciences,
University of California, San Diego
1968 – 1980 Lecturer through Associate Professor, Department of Neurosciences,
University of California, San Diego
1964 – 1968 USPHS Traineeship at Yale University in Physiological Psychology
with Robert Galambos
1963 – 1964 Research Assistant at Caltech in Psychobiology with C. R. Hamilton
and R. W. Sperry

TEACHING AREAS

Basic Medical Neurology
Sensory Processes: Neurophysiology of Vision and Audition
Human Information Processing: Attention and Perception
Psychophysiology
Neuropsychology

HONORS AND AWARDS

Fellow of the American Association for the Advancement of Science
MERIT Award from National Institute of Mental Health
UCSD Neurosciences Department Outstanding Teacher Award

ADVISORY AND REVIEW PANELS

NIMH Study Section: Mental Health Small Grant Committee, 1976 – 1980.
NIMH Study Section: Neurosciences Research Review Committee, 1986 – 1990.
Advisory Council: International Association for the Study of Attention and Performance,
1978 – 1983, 1985 – Present.
Advisory Panel to NIMH Neurosciences Research Branch, 1982 – 1983.



S. James Press

Scientific Oversight Committee

EDUCATION

1961 - 1964 Ph.D., Statistics, Stanford University
1952 - 1954 M.S., Mathematics, University of Southern California
1950 - 1951 Physics, University of Minnesota
1947 - 1950 B.A., Physics, New York University

ACADEMIC HISTORY

1977 - Present Professor, Department of Statistics, University of California, Riverside
1984 - 1985 Visiting Scholar, Department of Statistics, Stanford University
1977 - 1984 Professor and Chairman of Department, Department of Statistics, University of California, Riverside
1974 - 1977 Professor, Faculty of Commerce and Business Administration, and Institute of Applied Mathematics and Statistics, University of British Columbia
1966 - 1974 Associate Professor, Graduate School of Business, University of Chicago
1972 - 1973 Visiting Professor, Department of Statistics and Department of Administrative Sciences, Yale University
1970 - 1971 Honorary Research Fellow, Department of Statistics, University College, London
1970 - 1971 Visiting Professor, Department of Statistics, London School of Economics and Political Science
1964 - 1966 Lecturer/Assistant Professor, Statistics, UCLA Graduate School of Business Administration - Business
1956 - 1960 Lecturer, Extension Mathematics Courses, UCLA Physical Science
Summer 1968 Visiting Professor, Department of Economics, UCLA

NONACADEMIC EXPERIENCE

1964 - 1966 Statistics, Econometrics, Operations Research, The Rand Corporation, Santa Monica, California
1954 - 1961 Statistical Analysis, Reliability, Operations Research, Douglas Aircraft Corporation, Santa Monica, California
1951 - 1954 Statistical Control and Information Theory, Northrop Aircraft Company, Hawthorne, California
1949 - 1950 Cosmic Ray Physics, Microscopy, Atomic Energy Commission, Brookhaven National Laboratories, Upton, New York

PROFESSIONAL MEMBERSHIPS

American Association for the Advancement of Science (Elected Fellow, January, 1981)
American Statistical Association (Elected Fellow, August, 1974)
Bernoulli Society for Mathematical Statistics and Probability
Biometric Society
Econometric Society



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International Statistical Institute (Elected December 1979)
Institute of Mathematical Statistics (Elected Fellow, 1981)
New York Academy of Sciences (Elected March, 1979)
Royal Statistical Society (Elected Fellow, 1971)
The Institute of Management Sciences



Melvin Schwartz

Scientific Oversight Committee

EDUCATION:

1958 Ph.D., Columbia University
1953 A.B., Columbia University

PROFESSIONAL EXPERIENCE:

1956 – 1957 Research Associate, Brookhaven National Laboratory
1957 – 1958 Associate Physicist, Brookhaven National Laboratory
1958 – 1960 Assistance Professor, Columbia University
1960 – 1963 Associate Professor, Columbia University
1963 – 1966 Professor, Columbia University
1966 – 1983 Professor, Stanford University
1983 – Present Consulting Professor, Stanford University
1970 – 1991 Chairman/CEO, Digital Pathways, Inc.
1991 – Present Associate Director for High Energy and Nuclear Physics,
Brookhaven National Laboratory

PUBLICATIONS:

Principles of Electrodynamics McGraw-Hill – 1972
 Dover Press – 1985

Approximately forth scientific articles in the field of High Energy Physics.

RESEARCH:

While at Columbia and Stanford: High Energy experimental particle physics with particular emphasis on weak interactions. Most noted achievement is the discovery of Muon type neutrinos.



Yervant Terzian

Scientific Oversight Committee

Yervant Terzian is the James A. Weeks Professor of Physical Sciences, and is the Chairman of the Department of Astronomy at Cornell University. He has been a member of the University faculty for 26 years (the first three of which were spent at Cornell's Arecibo Observatory.) He is also a Professor in the graduate field of History and Philosophy of Science and Technology. His fields of expertise are the physics of the Interstellar Medium, Galaxies, and Radio Astronomy. He has been a Visiting Professor at various universities including the University of Montreal (Canada), the University of Thessaloniki (Greece), and the University of Florence (Italy.) He has been Chairman or member of numerous national and international scientific committees affiliated with NASA, the U.S. National Academy of Sciences, and the International Astronomical Union. He has been President of Cornell's Sigma Xi Scientific Research Society; Chairman of Cornell's Research Policies Committee, a Danforth Associate, and a Research Professor with the National Astronomy and Ionosphere Center. He is a member of the International Astronomical Union, the International Union of Radio Science, the American Astronomical Society, and the Society for Scientific Exploration, among other memberships. His is an Associate Editor of *The Astrophysical Journal*. In 1984, he received the Clark Distinguished Award for Excellence in Teaching. In 1988, he was appointed Director to the New York Cluster of the Pew Undergraduate Program in Science Education, and in 1989 he was awarded an Honorary Doctor of Science Degree from Indiana University for his scientific achievements. In 1990, he was elected Foreign Member of the Armenian Academy of Sciences. He is the author or co-author of more than 150 scientific publications and the editor of four books. At Cornell he teaches a popular undergraduate course on "The Nature of the Universe" and graduate radio astrophysics courses.



Philip G. Zimbardo

Scientific Oversight Committee

EDUCATION:

1959	Ph.D., Yale University
1955	M.S., Yale University
1954	A.B., Brooklyn College

PROFESSIONAL EXPERIENCE:

1968 – Present	Professor, Department of Psychology, Stanford University
1970 – 1988	Director, Stanford University Social Psychology Research Training Program
1969 – 1980	Co-Director (with Dr. E. Hilgard), Stanford Hypnosis Research Laboratory
1963 – 1967	Training and Research in Hypnosis, Morton Prince Clinic, New York
1961 – 1968	Assistant/Associate Professor, New York University
1959 – 1960	Post Doctoral Trainee, West Haven Veteran's Hospital
1959 – 1962	Research Associate, Dr. S. Sarason, Yale University
1958 – 1961	Instructor/Assistant Professor, Yale University

Visiting Professor: Yale, Barnard College, Stanford, Columbia University, University of Louvain (Belgium), University of Texas, University of Hawaii, International Graduate School of Behavioral Sciences, Florida Institute of Technology at Lugano, Switzerland.

EDUCATION:

1989	Order of Merit List Selectee, US Army War College
1989	US Army Computer Science School, Artificial Intelligence Orientation
1988	Science Applications International Corporation, Soviet Military Operations Research Course
1985	US Army Command and General Staff College
1970	Bachelor of Arts, University of Miami

PROFESSIONAL EXPERIENCE:

1990 – 1991	Science Applications International Corporation, Menlo Park, CA. Employed by the Cognitive Sciences Laboratory to participate in a number of anomalous cognition experiments.
1984 – Present	Student and Author-Instructor, US Army Command and General Staff College

Prepare and present large and small group instruction to student officers in areas of advanced tactics, intelligence and Electronic Warfare operations, and Soviet tactics including Soviet Automated Troop Control. Developer of threat scenarios. Recognized Subject Matter Expert (SME) for US Army Intelligence and Electronic Warfare operations. Designer of the Artificial Intelligence decision support methodologies for Defense Advanced Research Projects Agency (DARPA) sponsored AirLand Battle Management (ALBM) Program. Principal instructor for Advanced Tactical Operations. Voting member of the prestigious CGSC Master Tactician Board. Developer of the standardized targeting and collection management doctrine to support 1989 publication of Corps Deep Operations Tactics, Tech-



Garrison Raptund, M.D.
Major General (Retired), United States Army

EDUCATION

1972 – 1975	George Washington University School of Government and Business Administration; half MBA curriculum completed when selected for Army War College, which superseded MBA course.
1964 – 1965	Chinese (Mandarin), private tutorial in Malaysia
1959 – 1960	
1949 – 1953	College of Physicians & Surgeons (P & S), Columbia University. M.D. Degree
1945 – 1949	Harvard College. A.B. Degree
1934 – 1945	St. Andrew's College Preparatory School, Aurora, Ontario, Canada

POSTGRADUATE MEDICAL TRAINING:

1961	NIH Postdoctoral Fellowship in Microbiology at P & S, Columbia
1954 – 1957	Pediatric residency: Babies Hospital, Columbia-Presbyterian Medical Center, New York; Chief Resident Pediatrician, 1956 – 1957
1953 – 1954	Internship, Bellevue Hospital, New York

PROFESSIONAL CERTIFICATION:

1961	Certified in Pediatrics by the American Board of Pediatrics
	Medical Licenses: New York No. 077729-1 California No. G-004697

MILITARY EDUCATION:

1976	Army War College, Carlisle, Pennsylvania
1966	Officer Career Course, Medical Field Service School, Fort Sam Houston, Texas
1957	Officer Orientation Course, Medical Field Service School, Fort Sam Houston, Texas

PROFESSIONAL EXPERIENCE:

Present Position	Consultant to Systems Engineering and Management Associates, Falls Church, Virginia
Responsible for facilitating commercialization of Strategic Defense Initiative technologies to the health care industry and the life sciences research community.	
1987 – 1990	Chief Scientist (Biomedical Operations), Flow General, Inc., McLean, Virginia
	Advised the Chief Executive Officer on health-related activities of the six subsidiary companies world-wide. Served as Director, Biomedical and Veterinary Services Division, Flow Laboratories, Inc., owned by Flow General, Inc.
1957 – 1986	United States Army
	Volunteered for Active Duty, Commissioned Captain, USAR, 1957; awarded Regular Army Commission, 1966; promoted to MAJ (1964), LTC (1967), COL (1968), BG (1979), MG (1981); Retired 1 September 1986.



MILITARY ASSIGNMENTS:

**MILITARY ASSISTANT
1979 - 1986** Assistant Surgeon General (R & D)
Pentagon, Washington, DC

1979 - 1986 Assistant to the
Pentagon, Washington, DC
Represented medical R & D on the Army General Staff and to the Office of the Secretary of Defense,
Office of Management and Budget, and Congressional committees.
Responsible for the Army Medical Research and Development (USAMRDC),

Represented medical R & D, Materiel, Personnel, and Budget, and Congressional committees.
Office of Management and Budget, and Congressional committees.
1979 - 1986 Commander, U.S. Army Medical Research and Development (USAMRDC),
Fort Detrick, Maryland
... leading to the development of the following:

1976 - 1979 Director, Walter Reed Army Institute of Research (WRAIR),
Washington, DC , \$40M budget), inclu

1976 – 1979 Director, Walter Reed Army Institute of Research, Washington, DC Command of largest DoD medical research lab (1400 personnel, \$40M budget), including research units in Thailand, Malaysia, Brazil, Kenya, and West Germany.

1975 - 1976 Deputy Director, WRAIR
Director for Ops

1974 - 1975 Troubleshooting the world-wide operations of WRAIR. Air Sciences Division

Troubleshooting the world-wide operations of WRAIR.
1972 – 1974 Chief, Life Sciences Division, Army Research Office, and Chief, Life Sciences Directorate, Office of the Chief of Research and Development, Headquarters, Department of the Army (HQDA)
“Life for food as well as all medical R & D.”

Headquarters, Department of the Army (HQDA) -
Only physician on Army General Staff; staff responsibility for food as well as all medical R & D.
Under USAMRDC Headquarters

Only physician on Army General Staff, staff Rep
Deputy Commander, USAMRDC Headquarters

1971 Deputy Commander, USAMRDC Headquarters
1971-1972 Chief, Research Planning Office, USAMRDC Headquarters

1970 - 1971 Chief, Research Planning Office, for Army medical research.

1970 - 1971 Prepared first long-range plan for Army medical research.
1969 - 1970 Director of Medical Research, US Army Medical Research and Development Command (USAMRDC) Headquarters

1969 - 1970 Development Command (USAMRMC) 
Gained staff cognizance for medical and environmental research.

Senior staff cognizance for medical and environmental research.
Commander, US Medical Research Unit, Kuala Lumpur

Senior staff cognizant Commander, US Medical Research Unit, Kuala Lumpur
1965 - 1969 Planned and executed lab and field research on rickettsial and other diseases with British, Australian, New Zealand, Thai, and Malaysian Armed Forces, and with Malaysian Ministry of Health, in Malaysia, Thailand, and Borneo.

1964 - 1965 Department of Rickettsial Diseases

Mite-borne typhus research.
1961 - 1964 Research Officer, WRAIR: Department of Rickettsial Diseases
Tick-borne spotted fevers.
1964 - 1966 Medical Research Unit, Kuala Lumpur, Malaysia

1958 - 1960 Research Officer, Walter Reed Army Institute of Research
Arthropod-borne viruses, mite-borne typhus.

1957 - 1958 Research Officer, Walter Reed Army Institute of Research
Diagnostic Section, Department of Virus Diseases

1. *Influenza arthropod-borne viruses.*

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